

Activity: Special Programs
Activity Summary

| Program Components Program Elements | FY 2005 Actual | FY 2006 Estimate | FY 2007 | | | Change From 2006 (+/-) |
|--|-------------------|---------------------|--|-----------------------------|-------------------|---------------------------------|
| | | | Fixed Costs & Related Changes | Program Changes (+/-) | Budget Request | |
| Emergency and Unscheduled Projects: | 3,944 | 2,956 | 0 | 0 | 2,956 | 0 |
| Emergency and Unscheduled Projects | [2,465] | [1,971] | [0] | [0] | [1,971] | [0] |
| Seismic Safety Program | [1,479] | [985] | [0] | [0] | [985] | [0] |
| Housing Improvement Program | 7,889 | 6,897 | 0 | 0 | 6,897 | 0 |
| Dam Safety and Security Program | 2,662 | 2,623 | 0 | 0 | 2,623 | 0 |
| Equipment Replacement Program: | 36,900 | 25,617 | 0 | -2,000 | 23,617 | -2,000 |
| Replacement of Park Ops. Equipment | [13,387] | [12,908] | [0] | [0] | [12,908] | [0] |
| Narrowband Radio Systems Program | [22,527] | [11,824] | [0] | [-2,000] | [9,824] | [-2,000] |
| Modernization of Information Management Equipment | [986] | [885] | [0] | [0] | [885] | [0] |
| Total Requirements | 51,395 | 38,093 | 0 | -2,000 | 36,093 | -2,000 |

Mission Overview

Special Planning contributes to the National Park Service's mission, and the Department of the Interior's mission in three primary mission goal areas: 1) Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context, 2) Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriation recreational opportunities, and 3) The National park Service uses current management practices, systems, and technologies to accomplish its mission. Special Programs also supports Department of the Interior goals PEO 1 (Resource Protection) Improve Health of Watersheds, Landscapes and Marine Resource; PEO 3 (Resource Protection) Protect Cultural and Natural Resources, and REO 1 (Recreation) Provide for quality recreation experience.

Activity Overview

The Special Programs activity provides for the performance of minor unscheduled and emergency construction projects, improvement of public use buildings to withstand seismic disturbances and damage, inspection, repair or deactivation of dams, repair of park employee housing, ensure adequate inventories of automated and motorized equipment, upgrade radio communications equipment and the improvement of information management capabilities. This activity is composed of four program components:

Emergency and Unscheduled Projects

To perform minor unscheduled and emergency construction projects to protect and preserve park resources, provide for safe and uninterrupted visitor use of facilities, accommodate unanticipated concessioner facility related needs, address unforeseen construction contract claim settlements, provide necessary infrastructure for approved concessioner expansion projects, and ensure continuity of support and service operations. This program component includes **Seismic Safety** projects, which improve the capability of public use buildings to withstand seismic disturbances and resulting damage.

Housing Improvement Program

Repair the more seriously deficient park employee housing units, and remove or replace others where needed.

Dam Safety and Security

Inventory and documentation, condition assessment, asset management integration, inspection and repair,

and the deactivation of dams and other streamflow control structures (levees, dikes, berms, canal plugs, high embankments with undersize culverts) to ensure the protection of life, health, property, and natural resources.

Equipment Replacement

- **Replacement of Park Operations Equipment.** Ensure adequate inventories of automated and motorized equipment to support park operations and visitor services throughout the National Park System are purchased to replace existing inventories that have met use and age limitations. Ensure that adequate inventories of new equipment are purchased for units recently added to the National Park System so that park operations and resource protection can begin unimpeded.
- **Narrowband Radio Systems.** Upgrade radio communications equipment to ensure rapid response to emergency and life-threatening situations as they arise.
- **Modernization of Information Management Equipment.** Improve the information management resource capabilities of the Service to ensure timely processing of data and intra-office telecommunications into the 21st century.

Activity: Special Programs
Program Component: Emergency and Unscheduled Projects; Seismic Safety

Justification of 2007 Program Changes

The 2007 budget request for Emergency and Unscheduled Projects is \$2.956 million, with no program changes for FY 2007.

Program Overview and FY 2007 Program Performance Estimates

The Emergency and Unscheduled Projects; Seismic Safety program component allows for the execution of emergency work on all types of national park unit facilities, as well as providing for studies and implementation of design changes to buildings potentially affected by seismic activity. This program is composed of two major components as described below.

Emergency and Unscheduled Projects [\$1.971 million]

The FY 2007 proposal addresses emergency and unscheduled needs. The National Park System contains over 30,000 structures and thousands of individual utility systems. Through the course of normal operations, these structures and systems can unexpectedly be damaged or fail, and require immediate attention to avoid more costly reconstruction in the future. Such work may require more than one fiscal year for project completion, but generally will not involve extensive planning or formal contract bidding procedures characteristic of line item construction. These may include replacement of potable water and wastewater treatment facilities damaged through minor fires, floods, mechanical breakdowns, and other unforeseen incidents. An example of the type of emergency projects is the replacement (currently underway) of the fort at Lewis and Clark NHP in FY 2005 after it was destroyed by fire.



In early October 2005, two months prior to the bicentennial commemoration of the arrival of Lewis and Clark, the 50-year old reconstructed Fort Clatsop at Lewis and Clark NHP is destroyed by fire.

Seismic Safety of National Park System Buildings: [\$0.985 million]

The National Park Service Seismic Safety Program is mandated by Public Law 101-614, Earthquake Hazards Reduction Act of 1977, National Earthquake Hazards Reduction Program Reauthorization Act of 1990, Executive Order 12699, Executive Order 12941, and NPS Directive 93-1. These mandates, along with related technical guidelines produced by the Interagency Committee on Seismic Safety in Construction and the Federal Emergency Management Agency, requires the NPS to adopt minimum standards of seismic safety in existing Federally-owned and leased buildings, and to apply appropriate seismic safety standards to new construction. Each agency has a seismic safety coordinator and works with the Department of the Interior Seismic Safety Program and the Department of the Interior Office of Managing Risk and Public Safety to evaluate, prioritize, and rehabilitate their inventory of extremely high risk (EHR), seismically deficient buildings. Information on the NPS seismic safety activities is provided annually to the Department of the Interior and biennially to the Federal Emergency Management Agency for inclusion into the National Earthquake Hazards Reduction Program Report to Congress.

The National Park Service continues to perform seismic studies, investigations, designs, and rehabilitation on public use buildings throughout the National Park System. The Service is working with the Department and the NPS regions and parks to prioritize the list of EHR buildings for seismic rehabilitation based on guidance and information from the Department of the Interior and Federal Emergency Management Agency. The goal of the program is to protect the parks' cultural resources and protect the public and NPS staff in the event of a seismic occurrence. Mitigation of all seismic deficiencies for both historic and non-historic buildings will be accomplished to meet current seismic building code requirements.

FY 2007 Planned Program Performance

For FY 2007, seismic safety evaluations, assessments, schematic design, design, construction documents, and/or construction work is proposed on the following:

- Golden Gate NRA – Alcatraz Guardhouse Complex (a.k.a. Sallyport), seismic and structural stabilization and rehabilitation.
- Golden Gate NRA – Seismic rehabilitation of Presidio Building 102.
- Hawaii Volcanoes NP – Design for the seismic rehabilitation of the Volcano House Hotel.
- Detailed seismic investigations will be conducted at the following high seismic zone parks – Golden Gate NRA, Cabrillo NM, Hawaii Volcanoes NP, Channel Islands NP, National Park of American Samoa, Yellowstone NP, Grand Teton NP, Death Valley NP, Redwood NP, Denali NP&Pres, and Virgin Islands NP.
- Detailed seismic studies and investigations will continue in parks located in both high and moderate seismic zone locations.
- The NPS will expand the program to include park areas that have been upgraded to high and moderate seismic hazard zones by the recently released USGS Seismic Hazard Maps. The program will start to collect building inventory information on low seismic zone parks located adjacent to high and moderate zone boundaries.

FY 2006 Planned Program Performance

For FY 2006, seismic safety evaluations, assessments, schematic design, design, construction documents, and/or construction work is planned for the following:

- Yosemite NP – Seismic rehabilitation of the Rangers' Club.
- Channel Islands NP - Smugglers Ranch House seismic rehabilitation
- Golden Gate NRA -Seismic rehabilitation of 18 Historic Building Foundations at Fort Cronkhite.
- Redwood NP - Seismic rehabilitation of Park Headquarters Building.
- Glacier Bay NP&Pres -Seismic rehabilitation of seven buildings.
- Klondike Gold Rush NHP - Seismic rehabilitation of the Visitor Center and Park Headquarters.
- Death Valley NP – Seismic rehabilitation of Building 48, Resource Office.
- Glen Canyon NRA - Seismic evaluation of the Weaver Ranch House.
- Kalaupapa NHP - Seismic evaluation of the Molokai Light Station.

- Continued follow-up work will be conducted in the south central Alaska parks resulting from the Magnitude 7.9 Earthquake of November 2002. Seismic safety assessments will be conducted at the Kennecott Mill Building in Wrangell St. Elias NP&Pres for the safety of concession tour operations.
- Detailed seismic studies and investigations will continue in parks located in both high and moderate seismic zone locations.
- The NPS is participating as a voting member on the development of the new 2008 Provisions for Seismic Regulations for New Buildings and Other Structures and is participating in the development of the new American Institute of Timber Construction Standards A190.1.

FY 2005 Program Performance Accomplishments

The National Park Service completed the seismic rehabilitation at the following facilities:

- Eugene O'Neill NHS –The Tao House, a national historic landmark.
- San Francisco Maritime NHP - Building 169, being used for storage of archeological artifacts.
- Salem Maritime NHS - The historic St. Joseph Hall Building.
- Channel Islands NP - The Scorpion Ranch House.
- Olympic NP –Three buildings identified for upgrading after the February 28, 2001 Nisqually Earthquake.
- Yosemite NP - The historic Wawona Hotel.

Seismic Rehabilitation work continues on the following facilities:

- Grand Canyon NP - Horace Albright Training Center complex.
- Golden Gate NRA - William Penn Mott, Jr. Visitor Center (Presidio Building 102).

Detailed seismic evaluations were conducted on the following facilities:

- Death Valley NP - Building 48.
- Yosemite NP - Rangers' Club Building.
- Channel Islands NP - Smugglers Ranch House.
- Golden Gate NRA - Fort Mason Tunnel.
- Redwood NP - Park Headquarters Building.
- Grand Teton NP - Seven buildings.
- Klondike Gold Rush NHP - Six buildings.
- Glacier Bay NP & P - Seven buildings.

The NPS participated as a voting member on the development of the new American Society of Civil Engineers Standard ASCE 31-03 for the Seismic Evaluation of Existing Buildings and contributed to the development of the Federal Emergency Management Agency Handbook FEMA 154 for the Rapid Visual Screening of Buildings for Potential Seismic Hazards.

Activity: Special Programs
Program Component: Housing Improvement Program

Justification of 2007 Program Changes

The 2007 budget request for the Housing Improvement Program is \$6.897 million, with no program changes for FY 2007.

FY 2007 Program Overview and Planned Performance

The Housing Improvement Program component repairs employee housing at parks and removes or replaces obsolete units in order to provide for adequate and appropriate housing needs at each park area. This involves in-depth studies and evaluations, including cost-benefit analysis and external benchmarking research. Additionally, the program component provides for ongoing improvement in housing inventory and assessment.

The FY 2007 funding request of \$6.897 million for the Housing Improvement Program will be used to repair the more seriously deficient park employee housing units and replace those that are obsolete. The funding will allow the NPS to continue toward the goal of bringing any necessary housing to a good condition and to sustain that housing over time. The NPS has developed a Servicewide five-year plan for improving housing stock in park areas where housing conditions exist that are less than good. Funding criteria and guidelines are used to prioritize all projects to ensure that the NPS is directing available funding to the greatest need for repair, rehabilitation, replacement, removal or construction. The NPS is utilizing standardized business practices as part of total asset management for housing inventory. Previously unaddressed key issues are being addressed universally. Through the Asset Management Process, the NPS will now know what housing units are in the inventory, as well as the condition of those housing units, the current replacement value of each unit, the requirements to properly sustain the unit over time, and the priority of each asset based on the Asset Priority Index (API). By having this data, the NPS will be better equipped to determine where to focus the available resources.

Park housing is a mission-essential management tool used to effectively and efficiently protect park resources, property, and visitors, and it involves a long-term commitment. Condition assessments, replacement of trailers and obsolete housing, housing rehabilitation, and removal of excess housing must continue. Park managers will use data received from inspections to develop cost-benefit analyses to determine fiscally responsible housing decisions. Where replacement housing is needed, the NPS will determine the proper mix of housing and examine the possibility of larger projects being identified for line item construction. For example, Yellowstone NP, Grand Canyon NP, and Grand Teton NP all have credible and verifiable housing needs that will require long-term planning efforts beyond the funding capabilities of the Housing Improvement Program.

In conformance with applicable benchmarks identified in the *National Performance Review*, the NPS is taking additional steps to ensure the cost-effectiveness of the replacement housing that will be constructed:

- The NPS will continue utilization of multi-unit dwellings and de-emphasize single-family units.
- The use of standard designs and specifications will reduce overall design costs and meet modular homebuilders' specifications, thereby allowing that sector of the housing industry to competitively bid on projects.
- All housing construction projects will be consistent with funding guidelines and funding criteria and will undergo a value analysis, including a functional analysis to help determine the most appropriate number, type, and design.
- Any exceptions to the above will be reviewed by the Servicewide Development Advisory Board (DAB). The Director will approve all projects.
- All housing projects will be subject to the Housing Cost Model as recommended by the National Academy of Public Administration (NAPA). Any project exceeding the cost predicted by the cost model will be

reviewed and approved by the Director prior to construction or revised as necessary to meet the cost predicted by the model.

- The NPS will seek prior approval from the House and Senate Appropriations Committees before constructing any new housing capacity in national park units, including housing that may be provided as a result of public/private partnerships.

At the direction of DOI and OMB, the NPS continues to work on a plan that will (1) measure the total cost of ownership of employee housing, (2) compare those costs with rental revenue, and (3) develop alternatives to close the gap between revenue and total cost of ownership.

In 2002, the NPS obtained consultant services to explore the feasibility of including public/private partnerships in assisting the NPS with employee housing. The consultant's preliminary findings showed that privatization through public-private ventures was not the best strategy for the NPS as a whole. However, because of potential partnership possibilities at Grand Canyon NP, further study is being conducted; findings on the potential at Grand Canyon NP should be available in February 2006. A final consultant report on the viability of public-private ventures is also expected by March 2006.

Recognizing that the full cost of providing housing is a prerequisite for any cost comparison of feasible options, the NPS is developing an automated web based application that will contain all housing and housing related data including a condition rating process for evaluating the condition of NPS housing for inclusion in the Facility Management Software System (FMSS). The intent is to capture full life cycle costs for housing and determine the delta between the cost to provide housing and the rent collected. Rocky Mountain NP and Yellowstone NP have been designated as pilot parks. Systems testing is currently underway. Rental rates for employee housing are limited by OMB Circular A-45 and this has been a factor in engaging the private sector as an alternative to maintaining a large inventory with insufficient rental income to cover full costs. Once the NPS has a reasonable measure of the full cost of providing housing and knows the delta between that cost and the rent collected, the NPS will continue working on alternatives to close the gap between revenue and costs to the extent possible. The findings of the Grand Canyon NP privatization effort will possibly be a viable alternative at some parks. Other alternatives could include leasing from the private sector and leasing park housing during non-peak times to the private sector. However, insufficient rental rates continue to be identified as the single most limiting issue that impairs the ability to successfully develop and implement alternatives.

Following the five-year Housing Improvement Plan, in FY 2007 the NPS plans to fund:

- 12 rehabilitation projects at 11 park areas
- 4 trailer/obsolete replacement projects in 4 park areas
- 1 removal project that will remove 6 units at Carlsbad Caverns NP.

FY 2006 Planned Program Performance

Following the five-year Housing Improvement Plan, in FY 2006 the NPS plans to fund:

- 17 rehabilitation projects in 13 park areas. These rehabilitation projects will result in the condition improvement of 24 units from poor to good.
- 7 replacement projects in 6 park areas that will replace 11 obsolete units and 13 trailers.
- Planning and design of 3 replacement projects in 3 park areas.
- 1 housing removal project in Lake Mead NP.

The ongoing operational effort to evaluate the condition of housing stock will continue in FY 2006 as a part of the NPS's larger efforts to improve asset management. The NPS Asset Management Program has made substantial progress in developing defensible models for estimating operations and maintenance (O&M) costs for housing. By updating the Total Cost of Facility Ownership (TCFO) analysis to include these modeled requirements, the Housing Program will be able to provide more accurate reporting as well as use the information to better manage their portfolio of housing assets. Also, because Housing is at the forefront of the asset management program, it would be the first asset type to fully execute the tracking and reporting of the four first tiers Federal Real Property Council Performance measures.

Unobligated Balances—In response to concerns raised by OMB and others regarding the growing unobligated carryover balances reported in the housing program, the Service reviewed its internal processes over the last three years and has aggressively implemented new strategies to insure projects are being implemented in a more timely fashion and funds utilized more efficiently. At the close of FY 2002, the unobligated program carryover was over \$20 million; it dropped to \$13 million in FY 2003; \$8 million in FY 2004 and \$5 million at the close of FY 2005. Since 2001, obligation rates have improved from 28 percent to 85 percent. Additional significant improvements are expected to occur during FY 2006.

Military Cost Model—The NPS began using the model following the 1998 NAPA Report on the construction program. Now that we have actual data, the NPS has been working with the National Association of Home Builders (NAHB) to refine the model to reflect more accurately the factors applied to NPS locations.

Housing partnership at Grand Portage NM—Housing Improvement funds have been used to offset the lease term agreement with Grand Portage NM and the Grand Portage Band of Minnesota Chippewa. The partnership is working well for Grand Portage NM and Isle Royale NP in providing seasonal employee housing. The units being leased in lieu of construction provide a significant savings to the government and continue to reaffirm an important partnership between the park and the Band.

FY 2005 Program Performance Accomplishments

Revision to Director's Order #36 and Reference Manual #36, Employee Housing is near completion. Editorial review and a formal review process will occur in FY 2006. These documents will provide the field with NPS housing management guidance, including a consistent process for determining housing need based on standards and criteria that can be applied Servicewide.

Through FY 2005, the NPS utilized the Housing Facility Condition Index (FCI) method to determine the percentage of improvement to separate NPS housing unit categories. Thirteen percent of employee housing assets were reclassified as being in better than fair condition (excellent and good) after FY 2005 rehabilitation and improvement work, and eighty-five percent of the housing inventory was improved when including units in fair or worse condition.

Business practices were developed to provide guidance to parks on how to capture all housing inventory and housing related data in FMSS. In addition the NPS began the development of an automated condition rating process and instructions for evaluating the NPS Housing interior and exterior condition for inclusion into FMSS.

Based on a Servicewide five-year Housing Improvement Plan, the NPS funded:

- 37 rehabilitation projects in 22 park areas. These projects will change the condition of 2 units from fair to excellent; 13 units from fair to good; 16 units from poor to good; 2 units from poor to excellent; and 2 units from poor to fair. Also, 2 units are being rehabilitated to address immediate health and safety issues and extend the useful life of the asset but there will be no change in condition.
- 6 replacement projects at 5 park areas. These projects will replace 11 obsolete units—10 trailers and 1 houseboat.
- Planning and design of 4 replacement projects in 4 park areas.
- Removal of 2 housing units in North Cascades NP.

Beginning in FY 2005, to make housing reporting consistent with all other asset types in the NPS, the method to determine improvement to the inventory as a whole without regard to current condition categories was measured by the FCI. As reporting capabilities in FMSS have been improved, the NPS housing assets changed from 3,800 to 4,088 housing assets currently reported in FMSS.



Construction of one of the new units that will replace the houseboat and a trailer unit at Isle Royale NP.

Activity: Special Programs
Program Component: Dam Safety and Security Program

Justification of 2007 Program Changes

The 2007 budget request for the Dam Safety and Security Program is \$2.623 million, with no program changes for FY 2007.

FY 2007 Program Overview and Planned Performance

The NPS Dam Safety Program is mandated by Public Law 104-303, Section 215, National Dam Safety and Security Program Act of 2002; U.S. Department of the Interior Departmental Manual, Part 753, Dam Safety Program; and the NPS Management Policies, 2001. The program is coordinated with the assistance of the Bureau of Reclamation. The primary reason for creating this program was to prevent another incident like the Rocky Mountain NP Lawn Lake Dam Failure of 1982 when three park visitors were killed and \$30 million in damages occurred. Because of Reclamation's expertise and oversight of the DOI Maintenance, Operation, and Safety Dams Program, the NPS has regularly used their services and advice in managing NPS dams and monitoring non-NPS structures affecting the National Park System. The program is necessary because of increased activity and development around, and downstream of, these dams.

The basic goal of the NPS Dam Safety Program is to either adequately maintain dams or deactivate them. While examinations, hazard potential assessments, or minor corrective actions are done using ONPS funds, this program annually addresses two to three major safety repairs/modifications on dams classified as having Downstream High or Significant Hazard Potential. There are an estimated 537 NPS dams and other type streamflow control structures ranging from major structures supporting large lakes to minor size classified structures which are used as water supply intakes, support for valuable natural habitat and provide cultural scenic landscape and recreation. To date from all funding sources, approximately 239 dams have had corrective actions completed, including 184 deactivations. It is estimated that 95 facilities are in good condition, 224 are in fair condition, 178 are in poor condition, and 40 do not yet have a completed condition assessment. Formal dam safety inspections are performed every three years by the Reclamation for the larger, more critical dams. Parks are responsible for ensuring that the Annual Informal Inspections Reports are completed for all dams and recommended maintenance is carried out.

FY 2007 Projects Slated for Corrective Action

- Appalachian NST, Nuclear Lake Dam, Repair major damage to outlet works and access.
- Blue Ridge Parkway, Peaks of Otter Dam, Modify with overtopping protection. Repair outlet conduit, toe drain system, and trash rack.
- Cuyahoga Valley NP, Virginia Kendall Lake Dam, Provide overtopping protection & embankment modification – Phase 3 of 3.
- Delaware Water Gap NRA, PEEC Dam, Remove and replace embankment and spillway. - Phase 2 of 2.
- Delaware Water Gap NRA, Hemlock Dam, Deactivate project including complete removal of the embankment, outlet works and spillway structure.
- Delaware Water Gap NRA, #10 Watergate Dam, Replace low level water outlet, remove decaying stumps from the embankment, rebuild the spillway and spillway bridge, and protect the toe of the dam with rip rap.
- National Capital Parks East, Flood Wall, Install engineered emergency closure to prevent reoccurrence of Hurricane Isabel flooding in September 2003.
- Fredericksburg and Spotsylvania Battlefields NMP, Ashton Dams #1 and #2, Deactivate to eliminate public safety threat.
- Various Servicewide, planning and asset management including closeout packages.

FY2006 Planned Program Performance

The following specific dam safety actions are planned (all fund sources):

- Blue Ridge Pkwy, Peaks of Otter Dam, correction of hydrologic inadequacy.
- Blue Ridge Pkwy, Mabry Mill Pond Dam, replacement of deteriorated outlet works.
- Chickasaw NRA, Veterans Dam, embankment repair and seepage control system.
- Cuyahoga Valley NP, Virginia Kendall Dam, correction of hydrologic inadequacy.
- Home of Franklin D. Roosevelt NHS, Ice Pond Dam, structural repairs and sediment removal.
- Prince William Forest Park, Camp 4 Dam, embankment and outlet works rejuvenation.

Based on previous experience, the following non-specific actions are expected as a result of ongoing asset inventory work and routine activities.

- Approximately four unspecified water control structures will be reclassified.
- Approximately thirty structures will be placed within the Inventory of Dams.
- Three Emergency Action Plans will be updated.

FY2005 Program Performance Accomplishments

The following dam safety actions were accomplished:

- Acadia NP, The Tarn Dam, deactivated.
- Blue Ridge Pkwy, Otter Lake Dam, severe leakage corrected and outlet works rejuvenated.
- Chesapeake and Ohio Canal NHP, Dam No. 5, severe leakage at western abutment mitigated.
- George Washington Birthplace NM, Ice Pond Dam, storm damage repaired.
- Lassen Volcanic NP, Manzanita Lake Dam, phase one of repairs completed.
- Point Reyes NS, Horseshoe Pond Dam, deactivated and coastal streamflow regime restored.
- There were 27 structures either acquired or discovered and placed within the Inventory of Dams.
- With NPS input, three Emergency Action Plans for three non-NPS owned dams were updated.
- There were four reclassifications.
- As a result of these activities, 5 projects were removed from the Seriously Deficient classification.

Activity: Special Programs
Program Component: Equipment Replacement Program

Justification of 2007 Program Changes

The 2007 budget request for the Equipment Replacement Program is \$23.617 million, a program change of -\$2.0 million from the 2006 level.

Reduce Support for Narrowband Radio Conversion: -\$2.000 million

The NPS is proposing to reduce funding for the Narrowband Radio System program in order to fulfill higher priorities needs in other areas. While this reduction will extend completion of the full narrowband project, all of the highest priority projects have been completed. Program Performance Change: This budget reduction will not have a direct impact on NPS performance goals.

FY 2007 Base Program Overview

By studying and regularly replacing outdated, underutilized, or insufficient equipment, the Equipment Replacement program component provides for a systematic, organized methodology for ensuring the efficiency and safety of the National Park Service's pool of equipment. One of the key areas of this program component is fleet management where, through efficiency analysis, the Service is working to reduce operational costs of its vehicle fleet. This program is comprised of three principal components as described below.

Replacement of Park Operations Equipment [\$12.908 million]

When new areas are added to the National Park System they must be equipped adequately to carry out basic park operations including maintenance, resource protection, and law enforcement functions. Older areas with aging inventories must have sufficient funding to replace equipment to ensure safe and efficient park operations. Daily park operations are dependent on various types of vehicles, vessels and other support equipment. The park service fleet ranges from sedans and pick-ups to marine vessels, emergency response vehicles and heavy construction equipment.

In 2004, the Department and the bureaus began a collaborative effort to improve the management of vehicle fleets, including examination of the infrastructure for fleet management within each bureau, the identification of best practices that could be used Departmentwide, and the development of action plans to improve fleet management and realize cost savings. While the Service will continue to pursue fleet management options in FY 2007 that will include reducing the size of the fleet and disposing of under-utilized vehicles, the continued replacement of high mileage vehicles and obsolete heavy construction equipment will be required to ensure the overall efficiency and safety of the National Park Service fleet and the stewardship of its facilities.

Replacement of emergency vehicles and equipment will protect the Service's infrastructure investment and improve visitor protection and safety. The Service's total vehicular, heavy mobile and other operations equipment replacement backlog as documented in the Project Management Information System is currently estimated at over \$120 million. Like all government agencies, NPS is working to control this backlog by reducing the size of its vehicle fleet.

Conversion to Narrowband Radio Systems [\$9.824 million]

In conformity with provisions contained in the Omnibus Budget Reconciliation Act of 1993, the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce, has directed conversion of all Federal land mobile radio (LMR) systems to a new technology known as "narrowband". The transition to narrowband equipment is intended to double the number of channels available to Federal users. Accordingly, those that are currently being denied access to valuable radio frequency spectrum (due to frequency congestion) will be accommodated



when the transition is completed. To minimize the delay in achieving full conversion, those systems that are to be transitioned after FY 2005 will be funded through this program and augmented as necessary by other NPS fund sources such as the Recreation Fee Program.

To meet new national interoperability, privacy and security requirements for public safety communications, encrypted digital radio technology is required for all public safety communications. The combination of requirements for Federal public safety organizations to utilize narrowband and digital technology requires complete replacement of all wireless equipment components; modification of existing components to meet the new requirements is not possible. Application of the technology requires new or updated needs assessments for the implementation and a complete re-engineering of existing systems that cover a large geographic area.

All new radio equipment must be compatible with the technology mandated by the NTIA, the Telecommunications Industry Association (TIA) and the National Institute of Standards and Technology (NIST) for all Federal users and security directives. The new system will:

- Improve the quality of public safety and law enforcement communications.
- Provide interoperability with other Federal agencies.
- Replace antiquated, failing communications equipment.
- Meet Federal telecommunications security standards.
- Offer better public safety services to park visitors.
- Present opportunities for sharing frequency, fiscal and physical assets among the DOI bureaus.
- Provide increased security for protecting the Nation's treasures against adverse activities.



There are over 4,800 radio frequency assignments on over 300 radio systems in the National Park Service, most of them critical for public safety, park resource management, fire suppression, search and rescue missions, and park administration. A Servicewide inventory of all radio equipment as to type, remoteness of facilities and operational needs, and an assessment of park users was first conducted in 1998 and again in 2002 to determine field requirements and to forecast replacement costs.

Some of the existing National Park Service radio communications systems are out of compliance with applicable technological standards required by the NTIA and are unable to meet current network channel access demand and related communications service-area requirements. This requires a complete reassessment process and reconfiguration of all technological and supporting physical assets. This reassessment process will employ an open architecture that will permit technology upgrades and expansion of the systems to meet changed operational requirements.

Within the amount requested for FY 2007, the Service will continue participation in the Departmental radio resource sharing and Federal government interoperable wireless communications initiatives. The nation's public safety wireless communications infrastructure is not equipped to meet the challenges that arise in emergency situations, primarily as a result of interoperability. The Department of the Interior and NPS are working with existing Federal communications initiatives and key public safety stakeholders to develop better technologies and processes for the cross-jurisdictional and cross-disciplinary coordination of existing systems and future networks. A Department of Homeland Security initiative is intended to improve first-responder capability among all participating Federal bureaus during national emergencies.

The NPS Narrowband Radio Conversion Plan includes 359 identified conversion projects. As the NPS has completed implementation of the higher priority projects that included many of the larger parks with correspondingly higher per unit implementation costs, a greater volume of projects are being addressed in the coming years. During FY 2007, 113 conversions are projected to be ongoing from FY 2006, an additional 35 conversions are expected to be initiated; and the following 72 park conversions are expected to be completed or near complete; bringing the total completed conversions to-date to 214.

FY 2007 Completed Radio Conversions (Planned)

| | |
|---------------------------------|---|
| Alibates Flint Quarries NM | Kenai Fjords NP |
| Allegheny Portage Railroad NHS | Keweenaw NHP |
| Antietam NB | Kings Mountain NMP |
| Bighorn Canyon NRA | Lake Meredith NRA |
| Black Canyon Of The Gunnison NP | Lake Roosevelt NRA |
| Blue Ridge Parkway | Little River Canyon NPre |
| Bluestone NSR | Manhattan Sites |
| Booker T. Washington NM | Martin Van Buren NHS |
| Canaveral NS | Mary McLeod Bethune Council House NHS |
| Castillo de San Marcos NM | Missouri NR&RA |
| Castle Clinton NM | Monocacy NB |
| Catoctin Mountain Park | National Capital Parks-East |
| Chesapeake & Ohio Canal NHP | New Bedford Whaling NHP |
| Chickamauga & Chattanooga NMP | Northeast Regional Office-Boston |
| Crater Lake NP | Petrified Forest NP |
| Cumberland Gap NHP | President's Park (White House) |
| Curecanti NRA | Rock Creek Park |
| Dayton Aviation Heritage NHP | Sagamore Hill NHS |
| Devils Postpile NM | Saint Paul's Church NHS |
| Effigy Mounds NM | Saint-Gaudens NHS |
| Federal Hall NM | Scotts Bluff NM |
| Flagstaff Area Parks | Sequoia & Kings Canyon NPs |
| Fort Matanzas NM | Sleeping Bear Dunes NL |
| Fort Pulaski NM | Sunset Crater Volcano NM |
| Fort Washington Park | Theodore Roosevelt NP |
| Frederick Douglass NHS | Theodore Roosevelt Birthplace NHS |
| General Grant NM | Tuskegee Institute NHS |
| George Rogers Clark NHP | Voyageurs NP |
| Glacier NP | Walnut Canyon NM |
| Glacier Bay NP&Pre | Weir Farm NHS |
| Great Basin NP | Wilson's Creek NB |
| Greenbelt Park | Wind Cave NP |
| Hamilton Grange NM | Wolf Trap National Park for the Performing Arts |
| Harpers Ferry NHP | Women's Rights NHP |
| Jewel Cave NM | Wupatki NM |
| Johnstown Flood NM | Zion NP |

Modernization of Information Management Equipment [\$0.885 million]

To meet ever evolving federal Information Technology (IT) standards and requirements, continuous upgrading of equipment and software is required. Changes are continuously being implemented to ensure the security of our electronic data and prepare for future initiatives. For example, the Service is currently being scored against the Federal Information Security Management Act (FISMA), which provides the formal framework for securing IT assets. All agencies must implement the requirements and report annually to the Office of Management and Budget (OMB) and Congress on the effectiveness of their security program.

The Department of the Interior has adopted a four-year cycle for equipment replacement. The funds provided in this program along with other resources are used to replace Service-wide IT infrastructure that maintain the backbone of the NPS IT program. They represent only about 10% of the funds needed annually to modernize NPS IT equipment and is complemented with funds from other sources as necessary

FY 2006 Planned Program Performance

Conversion to Narrowband Radio Systems

During FY 2006, 177 conversions will be ongoing from FY 2005; 53 new conversions are planned for initiation and the following 117 conversions are planned to be completed—bringing the total completed conversions to-date to 142.

FY 2006 Completed Radio Conversions (Planned)

| | |
|---|---|
| Alaska Support Office | Home of Franklin D. Roosevelt NHS |
| Andersonville NHS | Horseshoe Bend NMP |
| Arlington House, The Robert E. Lee NMem | Independence NHP |
| Badlands NP | Indiana Dunes NL |
| Big Bend NP | Jefferson National Expansion Memorial |
| Big Hole NB | Jimmy Carter NHS |
| Boston NHP | John D. Rockefeller, Jr. MP |
| Boston African American NHS | John Day Fossil Beds NM |
| Boston Harbor Islands NRA | John Muir NHS |
| Buck Island Reef NM | Korean War Veteran National Memorial (KOWA) |
| Cape Cod NS | Lake Chelan National Recreation Area (LACH) |
| Charles Pinckney NHS | Lake Mead NRA |
| Chattahoochee River NR | Lincoln Boyhood NMem |
| Christiansted NHS | Lincoln Memorial NMem |
| Clara Barton NHS | Lowell NHS |
| Congaree NP | Lyndon Baines Johnson Memorial Grove NM |
| Constitution Gardens | Minidoka Internment NM |
| Cowpens NB | Minute Man NHP |
| Cumberland Island NS | Minuteman Missile NHS |
| Denali NP&Pres | Mojave NPRES |
| Edgar Allan Poe NHS | Morristown NHP |
| Edison NHS | Mount Rainier NP |
| Eisenhower NHS | Mount Rushmore NM |
| Eleanor Roosevelt NHS | National Capital Parks-Central (NACC) |
| Eugene O'Neill NHS | National Mall (NAMA) |
| Fire Island NS | Navajo NM |
| Ford's Theater NHS | New River Gorge NR |
| Fort Donelson NB | Nez Perce NHP |
| Fort Necessity NB | Ninety Six NHS |
| Fort Stanwix NM | Niobrara NSR |
| Fort Sumter NM | North Cascades NP |
| Fort Vancouver NHS | Obed WSR |
| Franklin Delano Roosevelt Memorial NMem | Ocmulgee NM |
| Fredericksburg & Spotsylvania NMP | Olympic NP |
| Friendship Hill NHS | Padre Island NS |
| Gateway NRA | Park Police New York |
| Gauley River NRA | Park Police Washington |
| George Washington MP | Piscataway Park |
| George Washington Birthplace NM | Potomac Heritage NST |
| Gettysburg NC | Prince William Forest Park |
| Gettysburg NMP | Rainbow Bridge NM |
| Glen Canyon NRA | Rio Grande WSR |
| Grand Teton NP | Rocky Mountain NP |
| Great Smoky Mountains NP | Roosevelt Vanderbilt |
| Guilford Courthouse NMP | Ross Lake NRA |
| Hagerman Fossil Beds NM | Salem Maritime NHS |
| Herbert Hoover NHS | Salt River Bay NHP |

FY 2006 Completed Radio Conversions (Planned)

| | |
|--------------------------------|---------------------------------|
| San Juan Island NHP | Thomas Stone NHS |
| Saratoga NHP | Upper Delaware SRR |
| Saugus Iron Works NHS | Vanderbilt Mansion NHS |
| Shenandoah NP | Vicksburg NMP |
| Shiloh NMP | Vietnam Veteran's Memorial NMem |
| Springfield Armory NHS | Virgin Islands NP |
| Steamtown NHS | Washington Monument NM |
| Stones River NB | World War II Memorial NMem |
| Thaddeus Kosciuszko NMem | Wrangell - St Elias NP&Pres |
| Theodore Roosevelt Island NM | Yellowstone NP |
| Thomas Jefferson Memorial NMem | Yosemite NP |

Evaluation of the USPP needs will continue as described under the FY 2005 accomplishments. Implementation dates will depend on results from the ongoing studies. No additional funding for the USPP conversions is anticipated to be required based on current results.

Modernization of Information Management Equipment

For FY 2006, the Service will continue to improve its management of information and related business practices. Funds will be used to continue strengthening the Service's IT infrastructure and IT security, including protection of the NPS public-accessible web servers and to continue equipment replacement at the park and regional level as they comply with the standard PC platforms established for the implementation of Active Directory throughout the Service. This replacement approach will aid the overall IT security of the NPS network as older, less secure equipment is replaced with PCs capable of running the newer Microsoft operating system with its integrated security features as required by the Department's IT Architecture. The funds will also enable the Service to implement the Active Directory more efficiently. In FY 2006 NPS plans to decrease help desk calls from an average of 7,260 to less than 6,500 in support of the national messaging and network infrastructure. This decrease will occur through the implementation of more reliable and robust information technology hardware and related software.

FY 2005 Program Performance Accomplishments**Conversion to Narrowband Radio Systems**

The project management team revamped the Service-wide Narrowband Conversion Tracking Database. The database records actions associated with the narrowband conversion effort since FY 1998 and makes future work projections through the projected completion in FY 2011. The system tracks four critical milestones for project completion: (1) Projects Starts, (2) Narrowband/Digital Converted, (3) Same Radio Coverage Obtained and (4) 100% Satisfaction.

In FY 2005, 178 conversions were ongoing; 24 additional conversions were initiated; and the following 25 projects were completed:

FY 2005 Completed Radio Conversions

| | |
|--------------------|-----------------------|
| Amistad NRA | Everglades NP |
| Aztec Ruins NM | Fort Bowie NHS |
| Bandelier NM | Fort Raleigh NHS |
| Big Cypress NP | Kennesaw Mountain NBP |
| Biscayne NP | Maggie L. Walker NHS |
| Cape Hatteras NS | Mammoth Cave NP |
| Cape Lookout NS | Natchez Trace Pkwy |
| Channel Islands NP | Organ Pipe Cactus NM |
| Chiricahua NM | Richmond NBP |
| Colonial NHP | Saguaro NP |

FY 2005 Completed Radio Conversions

Coronado NMem
Cuyahoga Valley NP
Dry Tortugas NP

Salinas Pueblo Missions NM
Wright Brothers NMem

The NPS also continued with a systems analysis for the United States Park Police (USPP) field areas. The ongoing assessment has revealed significant shortfalls in the existing USPP systems in Washington, D.C., New York City and San Francisco. To meet the goal of interagency communication capabilities, using previously appropriated funds, the NPS is continuing to work with other agencies to evaluate the most appropriate systems for these sites before implementing a solution. Due to the complexities associated with the wide variety of agency systems that must be integrated, a date for implementation at these sites can't be determined until further studies are completed.
